Transforming Perceptions of Presence: Reporting from an Action Research Project

Rikke Lindekilde, Aarhus University, Aarhus, Denmark
Pernille Bjørn, Copenhagen University, Copenhagen, Denmark

ABSTRACT
When working in globally distributed settings, the perception of presence in collaboration and the use of technology directly impact how people are able to act in daily work practices. This paper identifies new ways to transform the way people think about presence in global collaboration, with the aim of improving their work. Thus, the researchers conducted an action research study over a period of 21 months, where collaborative partners working within a global engineering company were invited to participate in workshops facilitating improved global collaboration. Through two action cycles the techniques were improved in order to make people reflect upon current practices with the aim of transforming their perceptions of presence when working remotely. This paper builds on a sociotechnical approach and presents the results of the action research arguing that while discursive interventions challenging people’s perceptions are important, the embodied experience of the activities are essential to be able to transform people’s perceptions on presence and improve the global collaboration.

KEYWORDS
Action Research, Embodied Experience, Global Collaboration, Interventions, Presence

INTRODUCTION
Global collaboration certainly suggests a host of new opportunities for individuals and companies alike. With the arrival of various collaborative technologies new opportunities for global collaboration continue to emerge, but with new technologies, new questions and challenges also materialize (Maznevski and Chudoba, 2000; Gibson and Cohen, 2003; Olson and Olson, 2013). These challenges include technological discontinuities, time zone differences, and cross-culture communication (Bjørn and Christensen, 2011). One key challenge in global work is related to people’s perceptions of presence in global collaboration and the ways in which closely coupled interaction is possible across geographical distance (Lindekilde and Bjørn, 2015). People’s perceptions of distributed collaboration directly impact the ways in which daily work practices emerges (Bradner and Mark, 2002; Orlikowski and Gash, 1994). The process of transforming perceptions and work practices in global collaboration is a topic, which deserves attention (Dubé and Robey, 2008).

In this paper, we want to identify new ways to transform people’s perceptions on presence in global collaboration, with the aim of improving the collaborative possibilities for working closely with remote colleagues supported by information systems technology. This study can be said to have a sociotechnical approach as it investigates more than just information systems technology, or just the global team members, in addition it examines the phenomena which is a result when the two interact. Sociotechnical research is premised on the mutual constitution among the features of
information systems technology and the social norms, habits of use by the humans involved (Barley, 1988). Thus, theoretically grounded within the literature on global collaboration, presence and transformation (e.g. Bjørn et al. 2014), we conducted an action research project (Rapoport, 1970), with the aim of transforming people’s perception of presence over two action cycles. The action research study was conducted within a research and development (R&D) department of a global engineering manufacturing company we refer to as "ScanEngineering”.

The practical goal of the action research project was to concretely facilitate participants in the R&D department, who were globally dispersed to improve their collaboration. During the last decades the organizational structure of the R&D department has changed from a primarily Danish department to a global division located in China, Hungary, and the US. This organization required a change in the ways management interact with each other and engage in technology-mediated activities. Particular ScanEngineering wanted to empower and increase the involvement of the subsidiaries in new products development in the R&D department. Thus, the action research interventions were designed with the dual goal of supporting the practical challenges of designing appropriate interventions while developing theoretical conceptualizations on the characteristics of such successful interventions. We found that while interventions based upon discursive characteristics can support reflective practices, embodied interventions turned out to be most effective. The embodied interventions were organized as activities where the participants were challenged in their perceptions of presence in global collaboration through collective embodied experiences with global colleagues.

The paper is structured as follows. First we review previous literature on distributed work with an emphasis on presence and transformation in global collaboration. This is followed by an introduction to the action research project, including detailed account of the data sources. The result section is divided into two main sub-sections, each presenting the interventions as they were planned, executed, and reflected upon in the two action research cycles of the project. We then discuss the results of the empirical investigations with the aim of figuring out, why the interventions in the second cycle were much more effective than in the first action cycle. Finally, we present our conclusions.

WORKING GLOBALLY

Global Collaboration

Working globally is the new normal for many multinational companies within global software development, manufacturing, engineering (Majchrzak et al., 2000) and research in distributed collaboration has become core for IS research (Vlaar et al., 2008; Matthiesen et al., 2014) Predominately, collaboration across geographical distance has been investigated in terms of common ground, coupling of work, collaborative readiness, technological readiness, and management and decision making (Olson and Olson, 2014). Even with later revisions and newer results in distributed work research (Bjørn et al., 2014) it is confirmed that geographical distance still matters.

Traditionally the literature has conceptualized geographical distance and perceived distance as similar and overlapping notions. However, Bradner and Mark (2002) show how the potential impact that geographical distance has on distributed collaboration is not fixed, but rather dependent on factors such as the amount of interaction. Thus, although team members initially cooperate less with someone they perceive as far away, their willingness to interact increases quickly with interaction (Bradner and Mark, 2002). Bjørn et al. (2014) support this finding showing how geographical distance matters less among closely-coupled workers due to continuous interaction compared to their loosely-coupled counterparts.